

### **BET 1319 Therapeutic Support Equipment Systems**

Theory, application, restoration, rectification, and renovation of electrical and mechanical apparatus used for therapeutic procedures; includes dental operating, ultrasonic, electrosurgical, anesthesia, and inhalation therapy systems.



### **BET 1320 Therapeutic Support Equipment Systems II**

Theory, application, technical analysis, rectification, and renovation of electrical and mechanical apparatus used for therapeutic procedures; includes infusion devices, diathermy, infant incubator/isolette, dental laboratory, suction and pressure, sterilization, ultrasonic cleaning, and surgical/obstetrical suite environmental systems.

### **BET 1321 Diagnostic Support Equipment Systems I**

Inspection, operation, troubleshooting, repair, and testing of tissue processing, optical magnifying, centrifuge, electronic particle counting, spectrophotometric, and flame photometer systems.

### **BET 1323 Diagnostic Support Radiographic Systems**

Radiation physics and safety; design/maintenance of advanced diagnostic radiographic systems; and inspection, operation, troubleshooting, repair, and testing procedures applicable to medical/dental radiographic systems.

### **BET 1324 Physiological Monitoring System**

Operation, inspection, analysis, and repair of hearing measurement, cardiac measurement, and other physiological monitoring systems.

### **BET 1325 Field Equipment Support Systems**

Maintenance, operation, and inspection of power production, distribution, lighting, forced air, heat/air-conditioning, and refrigeration/steam generation systems.

### **BET 2308 Advanced X-Ray Principles**

Principles and procedures used for installation, troubleshooting, repair, and calibration of x-ray systems. Includes image intensifier principles, closed-circuit television, dental x-ray, and three-phase radiologic systems.

### **BET 2318 Installation and Maintenance of X-Ray Systems**

Practicum in setting up, troubleshooting, and repair of advanced radiologic systems, image intensifiers with closed-circuit television, and automatic collimator systems.

### **BET 2322 X-Ray Systems Technology**

Preinstallation surveys; procurement, installation, and calibration of x-ray systems; radiographic and fluoroscopic principles; and Bureau of Radiological Health Compliance testing.

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## **Carpentry**

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### **CAR 1501 Introduction to Carpentry**

Construction materials, drawings, and technical publications. Selection of handtools and cutting materials for cabinet construction, joint fitting, surface sanding, and cabinet assembly.

### **CAR 1503 Building Construction**

Light frame construction: includes scaffold, foundation, form, roof, porch, and stair construction.

**CAR 1504 Building Finishing Work**

Installation of building finishing materials, including roofing, doors, windows, interior walls, flooring sizing, vents, louvers, insulation and prefabricated units; erection of prefabricated buildings; heavy timber construction; and man-hour and material cost estimates.

**CAR 1505 Structural Contingency Training**

Damage assessment and repair of runways, facilities, and fencing. Includes surface marking, construction of culverts, tent hardbacking, and contingency responsibilities of civil engineering personnel.

**CAR 2801 Advanced Roofing Repair**

Roof construction; includes selection of materials, tar kettle operation and inspection, and removal/repair of damaged roofs.

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## **Chemical Decontamination and Control**

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**CDC 1501 Chemical Defense and Decontamination**

Chemical defense procedures for ground crews; includes use and maintenance of protective equipment and organizing and managing protective shelters and contamination control areas. Includes simulated shelter exercises.

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## **Applied Chemistry**

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**CHE 2404 Applied Technical Chemistry**

Chemistry principles with theoretical and practical applications; includes periodic table, chemical compounds, bonding, states of matter, chemical reactions, and solutions. Includes radiochemistry, chemical and gas analysis, and spectrometers and chromatography.

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## **Civil Engineering**

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**CIV 1101 Civil Engineering Organization and Work Force Management**

Functional responsibilities associated with various base civil engineering operations; fundamental principles of Base Engineer Automated Management System (BEAMS) and its capabilities; BEAMS subsystem to input and retrieve computer data; and real property maintenance requests, job orders, service calls, and work programs.

**CIV 1102 Work Scheduling and Programming Resources**

Basic procedures used in material research and preparation for various types of work associated with base civil engineering support and preparation of inservice work plans and work programs.

**CIV 1501 Introduction to Site Development**

Surveying; includes application of related mathematics, emphasizing trigonometry/mathematical applications to surveying, calculators, and metric system.

**CIV 1504 Basic Drafting**

Operating reproduction machines, lettering, line weights, dimensioning, and sheet layout.

**CIV 1507 Multiview Drawings**

Construction of multiview drawings; includes geometric principles, orthographic projections, and isometric drawings.

**CIV 1508 Engineering Drawings**

Interpretation of basic engineering drawings to include blueprint reading; architectural plans and details; and structural, mechanical, electrical, and civil engineering drawings.

**CIV 2104 Work Planning**

Procedures used in material research and preparation. Includes planning of structure; selecting proper protective coating, electrical, plumbing, metal, and masonry materials; managing multishop work; and preparing various management reports.

**CIV 2106 Mechanical and Electrical Design**

Estimation and design of mechanical/electrical systems based on preliminary facility construction criteria. Includes plumbing, heating, and air-conditioning.

**CIV 2502 Civil Engineering Functions and Automated Management System**

Civil engineering organization, emphasizing functional responsibilities; includes programming of maintenance and repair requirements, purpose of automated management system, and use of system products.

**CIV 2508 Construction Management**

Contract management; includes material and equipment acceptance, workmanship, operational testing, and report preparation.

**CIV 2509 Soils Engineering and Pavements**

Soil identification to include listing specific gravity and grain size, moisture states and soil classification systems, compaction control, California Bearing Ratio, density determination, field identification, and soils exploration; includes flexible and rigid pavements.

**CIV 2510 Design Requirements**

Analysis of engineering design documents; includes sizing members for required strength, cost estimating, and master planning.

**CIV 2514 Construction Materials and Methods**

Application of related mathematical functions and blueprint reading; includes concrete, masonry, metals, wood and plastic, and thermal/moisture protection. Application of related mechanical/electrical materials.

**CIV 2516 Survey Computations**

Analysis of trigonometric functions, traverse data, earthwork volumes, grade stakes, road curves, and distances.

**CIV 2517 Architectural and Structural Design**

Preparation of required program documents, design sketches, and architectural/structural working drawings as well as use of mix data. Preparation/testing of plastic concrete for slump and air content and use of mixed concrete to prepare cylinder and beam test specimens.

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## **Cardiopulmonary Laboratory Technology**

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**CLT 1304 Fundamentals of Cardiopulmonary Anatomy and Physiology**

Cardiovascular and pulmonary anatomy/physiology and dysfunctions, intrinsic and extrinsic regulation, and acid-based physiology.

**CLT 1305 Introduction to Cardiovascular Diagnostic Principles**

Practice in invasive diagnostic, cardiac catheterization. Physical principles governing such noninvasive cardiovascular diagnostics as electrocardiography, echocardiography, apex/phonocardiography, stress testing, and vector cardiography. Interpretation/management of electrocardiographic arrhythmia.

**CLT 1306 Introduction to Pulmonary Diagnostic Principles**

Fundamentals of gas laws and respiratory dynamics. Assessment of pulmonary functions making use of spirometry, diffusion, lung volume, airway resistance, flow/volume loops, compliance, and blood gases.

**CLT 1307 Introduction to Respiratory Therapy**

Principles of medical gasses, specific medications used in respiratory therapeutics, physiological application of ventilator support, and management of acute cardiopulmonary emergencies.

**CLT 2305 Introduction to Cardiopulmonary Instrumentation**

Procedures and safety practices used in clinical application of blood gas analyzers and emergency equipment.

**CLT 2306 Cardiovascular Noninvasive Diagnostic Procedures**

Dynamic electrocardiography, stress testing, echocardiography, vectorcardiography and apex/phonocardiography. Interpretation of medical findings, emergency procedures, and procedures for referral of cases.

**CLT 2307 Cardiovascular Invasive Diagnostic Procedures**

Clinical procedures for obtaining data during coronary arteriography and cardiac catheterization. Specialized biographical transducers and sensing devices, cardiac output and shunt flow systems, blood analyzers, computer systems, cineangiographic equipment processors, x-ray fluoroscopic equipment, and videotape recording systems.

**CLT 2308 Pulmonary Diagnostic Procedures**

Clinical procedures for arterial puncture and blood gas analysis, calculation of results, and recognition of valid/invalid testing.

**CLT 2309 Advanced Pulmonary Diagnostic Procedures**

Assessment of pulmonary dysfunctions as measured by lung volume, diffusion capacity, flow/volume loops, airway resistance, compliance, maximum oxygen, and ventilation/perfusion ratio and use of computer/calculator systems to develop data tables and formulas.

**CLT 2310 Clinical Respiratory Therapy**

Recording patient history and physical condition, monitoring treatment, completing referral procedures, recognizing adverse reactions to medications, sterilizing and operating oxygen equipment, and performing fiber-optic bronchoscopy.

**CLT 2311 Advanced Respiratory Therapy**

Operation and maintenance of mechanical ventilators and augmentative devices, evaluating patient/ventilator interaction, maintaining patient's airway, and practice in weaning procedures and in referral and emergency procedures.

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## Computer Maintenance and Repair

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**CMR 1402 Diagnostic Testing**

Analyzing and isolating electronic equipment malfunctions using computer programs; includes use of technical manuals and general/special purpose test equipment.

**CMR 1728 Low-Speed Paper Tape Punch**

Operation, maintenance, analysis, and repair; includes mechanical adjustment/use of handtools, general/special purpose test equipment, and technical manuals.

**CMR 1729 High-Speed Paper Tape Punch**

Operation, maintenance, analysis, and repair; includes mechanical adjustment/use of handtools, general/special purpose test equipment, and technical manuals.

**CMR 1730 Card Punch Maintenance**

Operation, maintenance, analysis, and repair; includes mechanical adjustment/use of handtools, general/special purpose test equipment, and technical manuals.

**CMR 1740 Computer and Central Processor**

Operational theory, logic/circuit diagram analysis, and preventive/corrective maintenance; includes use of general/special purpose test equipment and technical manuals.

**CMR 1741 Peripheral Equipment**

Operational theory, logic/circuit diagram analysis, and preventive/corrective maintenance; includes use of general/special purpose test equipment and technical manuals.

**CMR 1744 Data-Processing Multiplex Equipment**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance and troubleshooting; includes use of general/special purpose test equipment and technical manuals.

**CMR 1746 Computer Maintenance**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes use of general/special purpose test equipment and technical manuals.

**CMR 1748 Video Monitor Principles**

Operational theory of cathode-ray tube and associated circuits, logic/circuit diagram analysis, corrective and preventive maintenance, and troubleshooting; includes use of handtools, general/special purpose test equipment, technical manuals, and applicable safety procedures.

**CMR 1749 Line Printer Maintenance**

Operational theory, logic/circuit diagram analysis, corrective/preventive maintenance, and troubleshooting; includes use of handtools, general/special purpose test equipment, and technical publications.

**CMR 1752 Computer Console Theory**

Systems analysis and operation; includes keyboard inputs, control panel functions, and logic/circuit diagram analysis.

**CMR 1753 Card Reader Maintenance**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes mechanical adjustment and use of handtools, general/special purpose test equipment, and technical manuals.

**CMR 1754 Optical Scanner Maintenance**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes mechanical adjustment and use of handtools, general/special purpose test equipment, and technical manuals.

**CMR 1755 Paper Tape Reader Maintenance**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes mechanical adjustment and use and care of handtools, general/special purpose test equipment, and technical manuals.

**CMR 2702 Memory Systems**

Operational theory, logic/circuit diagram analysis, and malfunction diagnosis of computer memory systems.

**CMR 2703 Drum Storage Systems**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes use of general/special purpose test equipment and technical manuals.

**CMR 2711 Timing and Control Systems**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes use of general/special purpose test equipment and technical manuals.

**CMR 2714 Data-Processing Equipment**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes use of general/special purpose test equipment and technical manuals.

**CMR 2733 Data-Display Equipment**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes use of handtools, general/special purpose test equipment, technical manuals, and applicable safety procedures.

**CMR 2751 Input and Output Control**

Principles of data flow and timing; includes logic/circuit diagram analysis and diagnosis of system malfunctions.

**CMR 2758 Keyboard Assembly**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes associated circuits and use of general/special purpose test equipment and technical manuals.

**CMR 2770 Computer Systems**

Advanced operational theory and configuration; includes data flow, logic/circuit diagram analysis, system operation, and diagnosis of system malfunctions.

**CMR 2774 Tape Storage Systems**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes use of handtools, general/special purpose test equipment, and technical manuals.

**CMR 2777 Display Electronics**

Theory of display sweep, azimuth, and deflection circuits; includes ball tab and cursor, lines and leaders, display programmer, symbol integration, alphanumeric positioning, data conversion, and pulse and video distribution.

**CMR 2782 Disk Storage Systems**

Operational theory, logic/circuit diagram analysis, preventive/corrective maintenance, and troubleshooting; includes use of general/special purpose test equipment and technical manuals.

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## Communications

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**COM 1100 Communications Systems Operation**

Operational theory of command communications systems, including data and broadcast transmitting/receiving systems.

**COM 1101 Key System Installation and Maintenance**

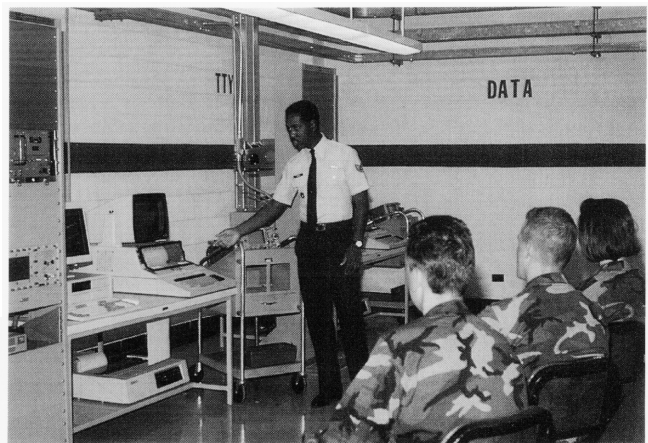
Principles of operation, circuit analysis, installation, and fault isolation of key systems and associated equipment; includes safety procedures, technical publications and use of handtools and general/special purpose test equipment.

**COM 1102 Solid-State Key Systems Installation and Maintenance**

Principles of operation, circuit analysis, installation, and fault isolation of solid-state key systems and associated equipment; includes safety procedures, technical publications and use of handtools and general/special test equipment.

**COM 1400 Electronic Communication Theory**

Transmitter and receiver systems; includes electronic principles, transmission lines, and antennas.

**COM 1403 Radio Communications Theory**

Transmitter principles, receiver tuning and operation, antenna systems, wave propagation, and communications procedures.

**COM 1404 Communications Network Equipment Operation**

Network equipment operating techniques/procedures for ensuring continuity, reliability, and speed of service; operation of relay station equipment, and concepts of operation of technical control facilities.

**COM 1412 International Morse Code**

Basics of international Morse code with lab.

**COM 1427 Electronic Recorder and Reproducer Fundamentals**

Audio and digital systems; includes theory of operation, fundamental applications, logic and schematic analysis, malfunction isolation, corrective maintenance, and alignment procedures.

**COM 1432 Ground Electronic Digital Timing Systems**

Receivers, oscillators, counters, amplifiers, indicator units, and associated power supplies; includes theory of operation, functional applications, logic and schematic diagram analysis, malfunction isolation, corrective maintenance, and alignment procedures.

**COM 1433 Airborne Radio Operations**

Operation of various types of airborne radio communications systems and related electronic equipment.

**COM 1439 Electronic Digital Communications Control Systems**

Frequency shift converters, wire-line modulators/demodulators, digital-to-digital converters, control interfacing, radio modulators/demodulators, and associated power supplies. Includes theory of operation and functional applications, logic/schematic diagram analysis, malfunction isolation, corrective maintenance, and alignment procedures.

**COM 1465 Communications Center Computer Functions**

Computerized communications principles and communications center operational concepts with emphasis on use of optical character reader, disk storage unit, and magnetic tape unit.

**COM 1466 Communications Security Analysis**

Basic principles of communications security; includes intelligence structure, communications procedures, equipment, and applied electronics.

**COM 1467 Command and Control Communications Countermeasures**

Concepts and issues; identification of threats, capabilities, criticality, and vulnerability for both tactical and strategic command, control and communications; and interrelated responsibilities of communication intelligence and operations.

**COM 1468 Command Post Fundamentals**

Operation of voice and data information systems and procedures used for command and control reporting.

**COM 1713 Telephone Fundamentals**

Principles of telephony and sound; includes security, safety, maintenance management procedures, and use of general/special purpose test equipment and technical publications.

**COM 1714 Electronic Telephone Switching**

Four-wire communications, radio signaling, safety procedures, and fault isolation and repair/use of handtools and general/special purpose test equipment.

**COM 1717 Introduction to Telephone Switching Systems**

Principles of telephone operation, switching system fundamentals, basic circuit analysis, safety, and use of technical publications.

**COM 1718 Fundamentals of Switch Marker**

Block diagram analysis of switch matrix, time generator, transfer check, and trouble access circuits; includes sequencing, common control call for service, line and trunk circuits (two-and four-wire), preventive maintenance routines, supervisory circuits and panels, and fault report interpretation.

**COM 1719 Fundamentals of Common Control**

Block diagram analysis of memory layout and addressing, register control circuits, call processing, final connection, peg count, trunk scanner, and memory programming.

**COM 1720 Telephone Substation Installation**

Terms, materials, specifications, telephone service orders, and conduit specifications; includes splicing drop wire, installation of substations and telephone instruments, and troubleshooting techniques.

**COM 1723 Telephone Equipment Maintenance**

Malfunction analysis and repair of basic telephone circuits, main distribution frames, and miscellaneous telephone equipment; includes use of safety procedures, handtools, and general/special purpose test equipment.

**COM 1729 Pole Climbing Fundamentals**

Care and use of climbing equipment, climbing techniques, first aid and general safety procedures, use of rope ties and splices, and raising/securing aerial splicing equipment; includes use of handtools, cable cars, and technical publications.

**COM 1730 Conductor Splicing**

Principles of cable plant and communication cables and fundamentals of telephony; includes sealing cable ends, preparation of cables for splicing, and conductor splicing techniques.

**COM 1733 Underground Cable Splicing**

Analysis of cable plant maps and splicing diagrams; includes splicing techniques, safety procedures, and use of general/special purpose test equipment and technical publications.

**COM 1734 Aerial Cable Splicing**

Analysis of cable plant maps and splicing diagrams; includes splicing techniques, safety procedures, and use of general/special purpose test equipment and technical publications.

**COM 1735 Cable Pressure Systems**

Use of manometer pressure testing gauges and gas flow indicators, leak location, flow analysis, and connection/adjustment of contractor terminals; includes installation of pressure plugs, flanges, and valves.

**COM 1741 Miscellaneous Telephone Equipment**

Circuit analysis, maintenance, and repair of supervisory circuits, toll test equipment, automatic trunk routiner, power equipment, and office routiner; includes cabling and cross connecting procedures.

**COM 1754 Circuit Conditioning**

Theory and operation of circuit-conditioning equipment used in telecommunication systems.

**COM 1755 Communications Equipment Maintenance**

Principles of operation, configuration, circuit analysis, and fault isolation; includes use of special/general purpose test equipment, technical publications, and handtools.

**COM 1756 Telecommunication Systems**

Analysis of electronic signals as applied to communications circuits; includes modulation and multiplexing applications, radio-wave propagation, networking principles, technical control operation, and reporting procedures.

**COM 1757 Telecommunication Systems Testing**

Test and measurement techniques used in circuit conditioning; includes systems analysis, alignment, adjustment, malfunction isolation, and use of general/special purpose test equipment.

**COM 1759 Fiber-Optic Cable Splicing**

Procedures and techniques for splicing, sealing, and testing fiber-optic cable; includes principles of fiber-optic systems, fusion and mechanical splices, and use of optical time domain reflectometers.

**COM 1760 Cable Splicing and Sealing**

Procedures and techniques for splicing, sealing, and testing lead and plastic sheathed cable; includes general/special purpose handtools, safety, straight splicing, bridge splicing, and butt splicing using auxiliary and lead sleeves.

**COM 2100 Communication Systems Operations/Maintenance**

Communication systems maintenance, management, and administration. Automation of record communications to include video, text, and voice. System administration includes maintenance of system menus, subordinate menus, and hardware.

**COM 2411 Frequency Management Applications**

Principles and techniques of applying frequency spectrum management controls. Includes organization and specific functions of international, national, and Department of Defense agencies with practical application coordinating with and reporting to these agencies.

**COM 2412 Systems Planning and Engineering**

Propagation predictions, interference factors, and path reliability for various communications systems; includes site planning, selection, surveying, and use of system design parameters.

**COM 2707 Telephone Outside Plant Fundamentals**

Principles of pole climbing; basic rigging procedures; applicable safety procedures; fundamentals of AC and DC; Ohm's law and DC circuits; physical characteristics of communications cable; procedures for locating buried cable; and use of construction tools, multimeters, and megohmmeters.



**COM 2708 Antenna Installation**

Antenna construction, elementary surveying, lightning protection, guy fabrication and installation, and erection of antenna support poles.

**COM2709 Antenna Maintenance Fundamentals**

Maintenance and installation of doublet, rhombic, discone, and UHF/VHF antennas; introducing coaxial cable types, pressurization of transmission lines, inspection, and testing.

**COM 2723 Cable Testing**

Maintenance of cable system records, strip maps, route markers; use of frequency generators, multimeters, and Wheatstone bridge; includes location and tracing of buried cable, fault location, excavation and backfilling procedures, insulation resistance measurement/calculation, and use of safety and communications security procedures.

**COM 2725 Cable Construction and Installation**

Aerial cable specifications in staking pole lines and distributing lines; erecting poles, guying, bracing, and anchoring; suspension strand installation; lashing aerial cable; terminal and stepping pole installation; and installation of buried cable. Includes use of technical publications, maintenance schemes, cable records, diagrams, cable car, and safety procedures.

**COM 2733 Tactical Air Control Network Operations**

Management of tactical air missions, communications operations, and weapons systems; includes weather report analysis.

**COM 2734 Satellite Communications (SATCOM) Operation**

Theory associated with technical aspects of SATCOM control and hypothetical problem-solving situations.

**COM 2736 Introduction to Digital Switching Systems**

Theory of telephone operation and call progression using applicable technical manuals; includes digital-to-analog/analog-to-digital conversions, time division multiplexing, peripherals, power equipment, and alarm circuits.

**COM 2737 Digital Switching Systems**

Basic principles of log utility module; translations used in call progression; and use of digital switching systems, data-base facilities, and data tables.

**COM 2738 Digital Switching Systems Maintenance**

Manual/automatic testing, inspection, troubleshooting, and operation of digital switching equipment.

**COM 2739 Communication Network Evaluation**

Systems analysis to include applicable mathematics, transmission line theory, signal distortions, line conditioning, digital theory, multiplexing, modulation, and computer and switching systems.

**COM 2740 Communication Network Testing**

Practical approach to systems analysis; includes use of general/special purpose test equipment and technical manuals.

**COM 2741 Digital Switching Systems Administration**

Introduction to duties and responsibilities of system administrator, interpretation of reports, and record documentation. Includes fundamentals of transmission lines and line testing.

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## Contracts

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**CON 1616 Introduction to Contract Administration**

Procedures for contracts, purchase requests, sole source justifications, and contract sources; includes Small Business Program purchase procedures, functions of systems management branch, automated file lists, and maintenance of contract files.

**CON 1617 Introduction to Contract Law**

Legal terminology and elements of contracts, including requirements and specifications, work statements, bonds, insurance, contract clauses, types of contract selections, modifications, and terminations. Government contracts versus private contracts, legal aspects of agency labor laws, and contract disputes and remedies.

**CON 1628 Programs and Management**

Automated and nonautomated procurement programs, computer input/output products and inquiries; includes management of integrated automated procurement programs.

**CON 1633 Materiel Systems Management**

Management of supplies, equipment, records, and finances and support of maintenance activities.

**CON 1643 Introduction to Government Contracting**

Government contracting authority and responsibility, including standards of conduct, security within contracting field, publications, and contract law.

**CON 1644 Introduction to Small Purchases**

Processing small purchase contracts, including an understanding of small purchase policies and methods, procedures for nonappropriated fund purchases, modification of contracts, and small purchase administration.

**CON 1645 Introduction to Contract Solicitation**

Administration of contract solicitations, including formal advertising, selecting bids, evaluating and awarding bids, contract compliance checks, and negotiation exceptions and corrections.

**CON 1646 Contract Procedures**

Procurement instrument identification numbering and procedures for acquisition instruments, customer-integrated automated purchasing systems, and automated contracting. Basic cost analysis, fair and reasonable cost/price analysis, and use of competition.

**CON 2109 Introduction to Contracting**

Fundamentals of Government contracting. Includes contract law; planning, programming, and budgeting; types of contracts; contracting sources; methods of contracting; formal advertising/negotiation; small purchases and general contracting policies; uniform contract format; contract preparation; and file documentation.

**CON 2114 Acquisition Fundamentals**

Fundamentals of system acquisition from statement of operational need through program management responsibility transfer. Includes acquisition life cycle;

ethics; program management and control; engineering; logistics; manufacturing quality assurance; test and evaluation; program transition; acquisition of communications-computer systems; total quality management; science and technology; and acquisition policies, initiatives, and trends.

**CON 2607 Principles of Contract Administration**

Procedures for administering contracts, including types of contracts, work statements, specifications and purchase descriptions, small purchase administration, quality assurance and warranties, foreign acquisitions, contract clauses and finance procedures, liquidated damages, contract modifications and disputes, contract negotiation methods, contract review and termination, contract pricing, and accounting procedures.

**CON 2611 Contract Advertising**

Methods of soliciting bids, opening bids and awarding contracts; includes preparing invitations for bid, preinvitation notices, prebid conference procedures, release of contracting information, evaluation and award of bids, and resolution of protests against an awarded contract.

**CON 2613 Base Contract Procedures**

Appropriate procedures pertaining to Government contracts. Includes contract publications and comptroller general decisions, contract sources and sole source justification, characteristics of contracts and contract numbering, and automated contracting procedures associated with Customer Integrated Automated Purchasing System.

**CON 2614 Utility Contracts Administration**

Laws, regulations, and publications applicable to regulated and nonregulated suppliers. Includes utility contract team responsibilities; prenegotiation preparation; contract requirements and specifications; connection charges and termination liabilities; utility rate schedules and analysis; and contract preparation, negotiation, and administration.

**CON 2616 Base Level Service Contracting**

Advanced service contracting policies, contract requirements, and surveillance planning. Includes a case study how on to conduct a job analysis, develop contract surveillance checklists, and evaluate contractor performance.

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## Corrosion Control

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### COR 1501 Corrosion Control

Identification of characteristics of metals and alloys, causes and types of corrosion, and mechanical/chemical removal of corrosion.

### COR 1506 Fundamentals of Metallic Corrosion

Aerospace equipment, technical manuals, maintenance management, characteristics of metals, and corrosion principles.

### COR 1507 Metallic Corrosion Control

Preparation of metal surfaces; includes corrosion inspection, preparation of fiberglass surfaces, mechanical and chemical corrosion removal, and surface treatment.

### COR 1508 Metallic Protective Coatings

Practical care and use of coating equipment; includes determining composition of coatings, application of coating systems, and identification of aerospace equipment markings.

### COR 2501 Corrosion Control Laboratory

Application of preservatives and surface preparation; includes protection from environmental factors, measuring effects of temperature and humidity, analysis of corrosive factors, use of toxics and caustic agents, and evaluation of compatibility of materials.

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## Dental Specialist

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### DAS 1305 Basic Dental Sciences

Facial, cranial, and intraoral anatomy; tooth morphology; elementary physiology and chemistry; dental disease; infection control; and provider/patient relations.

### DAS 1306 Clinical Procedures

Restorative and four-handed dentistry techniques and procedures, clinical/general emergency care, and dental instrument use. Incorporates use of materials and application of administrative regulations and procedures to dental records maintenance and patient scheduling.

### DAS 1314 Preventive Dentistry Science

Periodontal anatomy, microbiology, calculus, progression of periodontal disease, fluorides, anomalies, patient psychology, and chairside counseling.

### DAS 1315 Preclinical Procedures

Introduction to dental radiography, diagnostic and emergency dental procedures, and clinical operations. Performance of basic life support on mannequins.

### DAS 1316 Clinical Phase

Oral prophylaxis and operative assisting duties and dental radiography, emphasizing radiation exposure techniques and safety.

### DAS 2314 Advanced Dental Sciences

Head, neck, and oral anatomy; general/oral physiology; pathological/systemic disorders; dental therapeutics/emergencies; nutrition; and infection control procedures.



### DAS 2315 Advanced Dental Hygiene I

Preclinical dental hygiene techniques, concepts/philosophies of preventive dentistry, progression of periodontal disease, and principles of calculus formation and dental caries.

### DAS 2316 Advanced Dental Hygiene II

Treatment of oral hygiene and periodontal patients, finishing/polishing metallic restorations, topical fluoride application, placement of pit and fissure sealants, and patient communication.